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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,349	04/22/2005	Wolfgang Oswald	P70533US0	1735

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EXAMINER

GERRITY, STEPHEN FRANCIS

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/532,349	Applicant(s) OSWALD, WOLFGANG	
	Examiner Stephen F. Gerrity	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Preliminary Amendment

1. Receipt is acknowledged of a preliminary amendment, filed 22 April 2005, which has been placed of record and entered in the file.

Information Disclosure Statement

2. Receipt is acknowledged of an Information Disclosure Statement, filed 14 July 2005, which has been placed of record in the file. An initialed, signed and dated copy of the form PTO-1449 is attached to this Office action.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:

- a. the subject matter of claim 4, "an adaptation of the penetration behaviour to different materials and material thickness is feasible by the angle of inclination of the cutting surface";
- b. the subject matter of claim 8, "it is connected with a cushioning part located opposite the cutting surfaces"; and
- c. the subject matter of claim 9, "it comprises an internally arranged, second, unilaterally closed hollow cylinder, wherein said second hollow cylinder determines the exit opening for the gaseous or liquid medium between the separated foil layers by changes in position"

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because in line 3, the term "air-tightly" is misspelled, and because of the use of legal phraseology, i.e. means and said. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

Art Unit: 3721

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In claims 1-10, the use of the language "film-type substrates" and any of "a foil", "foil layers" or "a foil layer" renders the claims vague and indefinite because the terms (film-type substrates and foil) are inconsistent.

Claim 1 recites the limitation "the helically terminating portion" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the specially inserted cylindrical hollow body" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the helically terminating portion" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the angle of inclination" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 is considered vague and indefinite because it is unclear if the angle of inclination is somehow changed during use of the device or if there are simply different cutting surfaces provided with different angles of inclinations.

Claim 5 is considered vague and indefinite because the claim fails to define any structure that "determined" the distance.

Claim 5 recites the limitation "the lead of the thread" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 is considered vague and indefinite because the claim fails to define any structure that does the "determining" of the degree of adherence.

Claim 6 recites the limitation "the dimension of the thread" in lines 4 and 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 7-9, line 2, the use of the pronoun "it" renders the claim vague and indefinite.

Claim 7 is considered vague and indefinite because it fails to recite any structure for performing the function of "sucked in by vacuum".

Claim 7 recites the limitation "the cutting surfaces" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the cutting surfaces" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation ""the exit opening" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the gaseous or liquid medium" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the thread" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the interior" in line 4. There is insufficient antecedent basis for this limitation in the claim.

These and any other informalities should be corrected so that the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nimmo et al. (**GB 2,207,660**).

Regarding claims 1 and 3, the Nimmo et al. reference discloses a cylindrical hollow body (spigot 43) including a helically terminating portion (40 - fig. 4a) with at least one cutting surface (needle 42) which is used to penetrate film-type substrates (FRP sheets). The Nimmo et al. reference also teaches the method step of "wherein only a

Art Unit: 3721

desired number of foil layers"; Nimmo et al. also teaches that the device pierces by the defined rotation of the spigot and the extent of the torque of the cutting surface 42 - see p. 3, lines 16-22.

Furthermore, regarding claim 3, the language "is designed to gradually pierce a foil ..." (lines 6-9) is a statement of intended use which the Nimmo et al. reference is fully capable of performing, the claim fails to establish any structural difference between the invention and the device of Nimmo et al. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 4, the Nimmo et al. reference discloses different angles of inclination as demonstrated by the figures which is considered to meet the claimed subject matter. The language concerning determining is considered to be functional and arbitrary.

Regarding claim 5, the language of the claim is functional in how the device is intended to be used -- it does not define any structure which is not already taught by Nimmo et al. The functional language has been considered by does not define any structure. In order for structural limitations to be imparted to the claim, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph. The language concerning determining is considered to be functional and arbitrary.

Regarding claim 6, the Nimmo et al. reference discloses different dimensions of the threads of the different helical portions as demonstrated by the different figures. The language concerning determining is considered to be functional and arbitrary.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nimmo et al. (**GB 2,207,660**) in view of Tsuruta (**JP 59-182137**).

The Nimmo et al. reference meets all of applicant's claimed subject matter with the exception of the cushioning means, but the Tsuruta reference discloses that it is old and well known in the relevant art to provide a cushioning means (spring B) to support the sheets. The cushioning means (spring B) of Tsuruta is located opposite the helical cutting surface of drill (K). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Nimmo et al. reference by having provided a cushioning means located opposite the helical cutting surface, as suggested by Tsuruta, in order to cushion the sheets and actively support the sheets into position with respect to the cutting surface.

Allowable Subject Matter

12. Claims 2 and 8-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

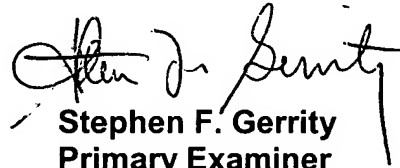
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the attached form (PTO-892) are cited to show devices for separating surfaces. All are cited as being of interest and to show the state of the prior art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen F. Gerrity whose telephone number is 571-272-4460. The examiner can normally be reached on Monday - Friday from 5:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3721

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen F. Gerrity
Primary Examiner
Art Unit 3721

22 September 2006